

# DCLU

## Director's Rule 22-2000

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| <b>Applicant:</b><br><br>City of Seattle<br>Department of Design, Construction<br>and Land Use | <b>Page</b><br><br>1 of 3  | <b>Supersedes:</b><br><br>DR 26-90 |
|  | <b>Publication:</b><br><br>8/3/00  | <b>Effective:</b>                  |
| <b>Subject:</b><br><br>Submittal Requirements for Open-Web<br>Steel Joist Framing Products     | <b>Code and Section Reference:</b><br><br>Seattle Building Code<br>Sections 104, 106, 1701 |                                    |
|  | <b>Type of Rule:</b><br><br>Code Interpretation  |                                    |
|  | <b>Ordinance Authority:</b><br><br>SMC 3.06.040  |                                    |
| <b>Index:</b><br><br>Building Code/Technical Requirements                                      | <b>Approved</b>  | <b>Date</b>                        |

### BACKGROUND

Open web steel joists and girders are important elements in the overall structural system of a building. They are pre-fabricated products produced to Steel Joist Institute (SJI) standards (UBC Division III). These products are typically designed and fabricated after the building permit is issued. This rule sets forth DCLU requirements and facilitates a consistent review by DCLU.

## **RULE**

The following items outline DCLU requirements for open-web steel joists and girders.

### **A. General:**

1. Three sets of drawings are required to be submitted to DCLU prior to fabrication of the structural steel product. Each set shall include a framing plan and elevation drawings for each different design of joists and girders.
2. The framing plan and the individual member designs must bear the stamp of a licensed professional engineer. The engineer may be licensed as a structural engineer or a civil engineer and may be registered in states other than Washington. There may be different engineers for the framing plan and the individual member designs.
3. The framing plan and the first sheet of details must also bear the review stamp of the structural engineer of record for the overall construction project. Unless each sheet is stamped, the plans shall include a note by the structural engineer of record stating which sheets have been reviewed.
4. Minimum plan size is 11 x 17 inches and information on the plans shall be of microfilmable quality.

### **B. Plan Requirements:**

1. Framing:
  - a. Member identifications.
  - b. Member spacings.
  - c. Bridging locations and connections.
  - d. Connections to structural supporting elements.
  - e. Location of fabricator's facility.
2. Individual Member Elevation Drawings:
  - a. Member designation and length.
  - b. Material specifications.
  - c. Chord and web sizes.
  - d. Weld sizes and lengths of the web/chord connections.

- e. Splice details.
- f. Design loads including concentrated loads.

These may be typical details on separate sheets, but must be cross-referenced to the individual design drawing.

C. Special Inspections:

- 1. Fabrication inspection is required only if the fabricator is not certified by DCLU.
- 2. Erection special inspection is required for every project.

D. Calculations:

Calculation of the member analysis is not required as a part of the submittal to DCLU. Calculations may be required by DCLU to resolve field questions.

E. Revisions:

Revisions that occur after DCLU has approved the drawing must be reviewed by DCLU staff if the revision is considered significant. All revisions must be reviewed by the engineer of record and stamped with the engineer's review stamp.

F. DCLU Review Guidelines:

- 1. Verify that the appropriate stamps are on the drawings.
- 2. Spot check only for a comparison with the issued building design loading requirements and framing.
- 3. Calculations are not required to be reviewed.
- 4. Determine if fabricator is approved by DCLU and notify DCLU's Quality Control unit if not approved.